

## **REMARKS**

Claims 1-34 are currently pending in the application. Applicant thanks the Examiner for noting the allowance of claims 11-20, 24-26 and 31-34 and noting the allowability of claims 4, 6-10, 22-23 and 28-29.

### **Rejection of claims 1-3, 5, 21, 27 and 30 under 35 U.S.C. §103(a)**

Claims 1-3, 5, 21, 27 and 30 were rejected under 35 USC §103(a) as being unpatentable over Dykstra in view of Bakker.

As stated in the Action, rejections under 35 U.S.C. §103(a) based on references that constitute prior art only under 35 U.S.C. 102(e) may be overcome by a showing that the subject matter of the reference and the claimed invention were, at the time of the invention, owned by the same person or subject to an obligation of assignment to the same person<sup>3</sup>. The Dykstra reference falls into this category of prior art, and thus the rejection noted above may be overcome by the submission of evidence in the form of a Declaration by the Applicant, who is also the first named co-inventor of the Dykstra reference.

The Declaration notes the Applicant's special knowledge of the facts and circumstances surrounding the history of ownership and inventorship of the subject matter in the Dykstra reference and the claimed invention. The Declaration describes Applicant's position as Director of Intellectual Properties at "Epion-MA"<sup>4</sup>, which owned the subject matter of the Dykstra reference and the claimed invention at the time the invention was made. The Declaration also discusses the recent transfer of ownership of the claimed invention, following the formation of the current owner, "Epion-DE"<sup>5</sup>.

Applicant respectfully submits that his declaration, including sufficient factual details regarding the ownership and inventorship of the subject matter in the Dykstra

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<sup>3</sup> MPEP §706.06(l)(1)

<sup>4</sup> Epion Corporation, a Massachusetts corporation and subsidiary of JDS Uniphase.

<sup>5</sup> Epion Corporation, a Delaware corporation

reference and the claimed invention, evidences that said subject matter was commonly owned at the time of the presently claimed invention was made. Thus, reconsideration and withdrawal of the above noted rejections is respectfully requested.

Objections to claims 4, 6-10, 22-23 and 28-29

Claims 4, 6-10, 22-23 and 28-29 were objected to as being dependent upon a rejected base claim, but allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Applicant thanks the Examiner for noting the allowability of these claims.

The rejected base claims from which claims 4, 6-10, 22-23 and 28-29 depend, as discussed above, now stand in a condition for allowance. Thus, Applicant respectfully requests reconsideration and withdrawal of the objected to claims.

For at least the above noted reasons, Applicant respectfully submits that claims 1-34 are in a condition for allowance, and respectfully requests that the examiner reconsider and withdraw all outstanding objections and rejections. Favorable consideration and allowance are earnestly solicited. Should there be any questions after reviewing this paper, the examiner is invited to contact the undersigned at 617-854-4000.

Respectfully submitted,

Dated: July 30, 2003

JERALD P. DYKSTRA, Applicant

By: 

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Attorney for Applicant



Attorney Docket No. 11460-111  
Application Ser. No. 09/905,536  
Rule 132 declaration

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

<b>Applicant:</b>	<b>Jerald P. DYKSTRA</b>	<b>Examiner:</b>	<b>Lam S. NGUYEN</b>
<b>Serial No.</b>	<b>09/905,536</b>	<b>Group Art Unit:</b>	<b>2853</b>
<b>Filed:</b>	<b>July 13, 2001</b>	<b>Confirmation No.</b>	<b>3492</b>
<b>Title:</b>	<b>GAS CLUSTER ION BEAM SIZE DIAGNOSTICS AND WORKPIECE PROCESSING</b>		

**RULE 132 DECLARATION**

The undersigned, Jerald P. Dykstra, sole applicant of the above-identified application, states:

1. I am Director of Intellectual Properties at Epion Corporation, Billerica, Massachusetts, a Delaware corporation ("Epion-DE"), assignee of the above-identified application. Epion-DE was formed in June 2003 and subsequently acquired the above-identified application and other patent assets from Epion Corporation ("Epion-MA"), a Massachusetts corporation and subsidiary of JDS Uniphase. I held the same position with Epion-MA throughout the period preceding the making of the invention and the filing of the present application and continuously to June 2003. I am now in the employ of Epion-DE.

2. Through employment, with Epion-MA and Epion-DE, and education over the course of twenty-five (25) years, I have been involved with design, development of, manufacturing of, and intellectual properties for ion beam processing equipment and ion beam processing methods, including ion implanters and ion implantation and gas cluster ion processing and equipment. I am familiar with the Epion-MA developments in materials modification including methods and apparatus for gas cluster ion beam production and use, ion implantation, ion beam assisted vapor deposition and the like. My curriculum vitae is attached hereto.

3. I have studied and am familiar with the above-identified application's specification and claims as originally filed on 13 July 2001, the Office Action dated 31 March 2003, and the Response A (to the Office Action of 31 March 2003) that accompanies this declaration, and with the prior art in the application. I am the sole inventor of the claimed subject matter of the above-identified application. At the time of the invention of the claimed subject matter, I was subject to an obligation to assign the claimed invention to my then employer, Epion-MA and upon filing the application did in fact assign the application and underlying invention to Epion-MA (assignment recorded at Reel 012245, Frame 0509 of PTO Assignment Records).

4. I note that there is an art rejection of claims 1-3, 5, 21, 27 and 30 pending in the said application on grounds of obviousness over Dykstra, *et al.* ('227) in view of Bakker ('683). The '227 patent is cited for teaching subject matter claimed in the present invention related to controllably deflecting gas cluster ion beams.

5. I am the first named co-inventor of the invention claimed in the '227 patent. As a co-inventor and someone who had been intimately involved in Epion-MA's intellectual property matters before, during, and after the preparation and filing of the '227 patent, I am familiar with the facts and circumstances surrounding the inclusion of the subject matter cited in the instant Office Action in the cited '227 reference. During my employment at Epion-MA, I made numerous inventive contributions to the subject matter described and claimed in the '227 patent. Among these contributions are apparatus for and methods of controllably deflecting gas cluster ion beams and means for preventing unwanted ultraviolet radiation from impinging on the substrate to be etched. My co-inventors contributed subject matter that includes means for preventing unwanted x-rays from impinging on the substrate and surface charging the substrate.

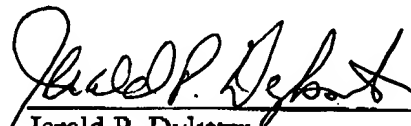
6. The subject matter of the '227 patent used in the obviousness rejection of the present Office Action was, at the time that the claimed invention of the above-identified application was made, either owned by Epion-MA, or subject to an obligation of assignment to Epion-MA that existed for each of the '227 patent's co-inventors, myself included. We did in fact assign the application leading to the '227 patent (and the

underlying invention and that assignment is recorded at Reel 010462, Frame 0445 on December 14, 1999. I note the discussion in the Remarks section of the accompanying Response A indicating that, due to this concurrent ownership or obligation of assignment, said subject matter is not available as prior art against the claimed invention of the above-identified application.

7. The '227 patent was co-pending when the present application was filed. At the 13 July 2001 filing of the present application, and for all times subsequent thereto the '227 patent has been owned by Epion-MA. Epion-DE is a licensee of the '227 patent, having exclusivity in certain fields of use and, as noted at par. 1, above, is now owner of the present application.

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both under Section 1001 of Title 18 of the United State Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Dated: July 28, 2003

By:   
Jerald P. Dykstra

11460-111-jh-Rule132-072803